

## Refine Search

### Search Results -

Terms	Documents
L3 and traveling adj salesman adj problem	17

Database:

US Pre-Grant Publication Full-Text Database  
 US Patents Full-Text Database  
 US OCR Full-Text Database  
 EPO Abstracts Database  
 JPO Abstracts Database  
 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

Search:






### Search History

 DATE: Tuesday, July 27, 2004    [Printable Copy](#)    [Create Case](#)
**Set Name**    **Query**  
 side by side

**Hit Count**    **Set Name**  
 result set

*DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=NO; OP=OR*

<u>L4</u>	L3 and traveling adj salesman adj problem	17	<u>L4</u>
<u>L3</u>	706/13.ccls.	220	<u>L3</u>
<u>L2</u>	760/13.ccls.	0	<u>L2</u>
<u>L1</u>	20030084011	2	<u>L1</u>

END OF SEARCH HISTORY

## Hit List

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Search Results - Record(s) 1 through 17 of 17 returned.

☐ 1. Document ID: US 20040044633 A1

Using default format because multiple data bases are involved.

L4: Entry 1 of 17

File: PGPB

Mar 4, 2004

PGPUB-DOCUMENT-NUMBER: 20040044633

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040044633 A1

TITLE: System and method for solving an optimization problem using a neural-network-based genetic algorithm technique

PUBLICATION-DATE: March 4, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Chen, Thomas W.	Ft. Collins	CO	US	

US-CL-CURRENT: [706/13](#); [706/21](#), [706/25](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Drawings
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☐ 2. Document ID: US 20030093391 A1

L4: Entry 2 of 17

File: PGPB

May 15, 2003

PGPUB-DOCUMENT-NUMBER: 20030093391

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030093391 A1

TITLE: Combinatorial fitness function circuit

PUBLICATION-DATE: May 15, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Shackleford, J. Barry	Portola Valley	CA	US	

US-CL-CURRENT: [706/13](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Drawings
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☐ 3. Document ID: US 20030084011 A1

L4: Entry 3 of 17

File: PGPB

May 1, 2003

PGPUB-DOCUMENT-NUMBER: 20030084011

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030084011 A1

TITLE: Methods for solving the traveling salesman problem

PUBLICATION-DATE: May 1, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Shetty, Ravindra K.	Bangalore		IN	

US-CL-CURRENT: 706/13

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 4. Document ID: US 20010037346 A1

L4: Entry 4 of 17

File: PGPB

Nov 1, 2001

PGPUB-DOCUMENT-NUMBER: 20010037346

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20010037346 A1

TITLE: Extensible markup language genetic algorithm

PUBLICATION-DATE: November 1, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Johnson, Judith A.	Lawrenceville	NJ	US	

US-CL-CURRENT: 715/513; 706/13, 707/104.1, 715/514, 715/522

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 5. Document ID: US 6490566 B1

L4: Entry 5 of 17

File: USPT

Dec 3, 2002

US-PAT-NO: 6490566

DOCUMENT-IDENTIFIER: US 6490566 B1

TITLE: Graph-based schedule builder for tightly constrained scheduling problems

DATE-ISSUED: December 3, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Schmidt; Craig W.	Somerville	MA		

US-CL-CURRENT: 705/8; 700/100, 700/104, 705/9, 706/13, 706/62

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 6. Document ID: US 6477519 B1

L4: Entry 6 of 17

File: USPT

Nov 5, 2002

US-PAT-NO: 6477519

DOCUMENT-IDENTIFIER: US 6477519 B1

TITLE: Cellular array for implementing the set merging function

DATE-ISSUED: November 5, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Shackleford; J. Barry	Portola Valley	CA		

US-CL-CURRENT: 706/45; 706/13, 716/2, 716/9

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 7. Document ID: US 6363368 B1

L4: Entry 7 of 17

File: USPT

Mar 26, 2002

US-PAT-NO: 6363368

DOCUMENT-IDENTIFIER: US 6363368 B1

TITLE: Optimum solution search method and optimum solution search apparatus as well as storage medium in which optimum solution search program is stored

DATE-ISSUED: March 26, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Shinagawa; Akio	Kawasaki			JP

US-CL-CURRENT: 706/13

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 8. Document ID: US 6185547 B1

L4: Entry 8 of 17

File: USPT

Feb 6, 2001

US-PAT-NO: 6185547

DOCUMENT-IDENTIFIER: US 6185547 B1

TITLE: Fitness function circuit

DATE-ISSUED: February 6, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Shackleford; J. Barry	Tokyo			JP
Okushi; Etsuko	Tokyo			JP
Yasuda; Mitsuhiro	Tokyo			JP
Iwamoto; Takashi	Tokyo			JP

US-CL-CURRENT: 706/13; 706/45, 707/1, 707/102, 707/6

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Draw. De
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☐ 9. Document ID: US 6052678 A

L4: Entry 9 of 17

File: USPT

Apr 18, 2000

US-PAT-NO: 6052678

DOCUMENT-IDENTIFIER: US 6052678 A

**\*\* See image for Certificate of Correction \*\***

TITLE: Problem solving operation apparatus using a state transition

DATE-ISSUED: April 18, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Itoh; Hiroyasu	Kawasaki			JP
Shinagawa; Akio	Kawasaki			JP
Nishimura; Toshihiro	Kawasaki			JP
Okada; Hiroyuki	Kawasaki			JP
Adachi; Nobue	Kawasaki			JP
Ohi; Hajime	Tokyo			JP

US-CL-CURRENT: 706/13; 706/20, 706/45

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Draw. De
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☐ 10. Document ID: US 5970487 A

L4: Entry 10 of 17

File: USPT

Oct 19, 1999

US-PAT-NO: 5970487  
DOCUMENT-IDENTIFIER: US 5970487 A

TITLE: Genetic algorithm machine and its production method, and method for  
executing a genetic algorithm

DATE-ISSUED: October 19, 1999

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Shackleford; J. Barry	Tokyo			JP
Okushi; Etsuko	Tokyo			JP
Yasuda; Mitsuhiro	Tokyo			JP
Iwamoto; Takashi	Tokyo			JP

US-CL-CURRENT: 707/6; 706/13, 706/45, 707/1, 707/102

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Drawings
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☐ 11. Document ID: US 5848402 A

L4: Entry 11 of 17

File: USPT

Dec 8, 1998

US-PAT-NO: 5848402  
DOCUMENT-IDENTIFIER: US 5848402 A

TITLE: Universal system for artificial intelligence based learning, categorization,  
and optimization

DATE-ISSUED: December 8, 1998

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Pao; Yoh-Han	Cleveland Heights	OH		
Yip; Pui-Chiu	Euclid	OH		

US-CL-CURRENT: 706/13; 706/14

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Drawings
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☐ 12. Document ID: US 5819244 A

L4: Entry 12 of 17

File: USPT

Oct 6, 1998

US-PAT-NO: 5819244  
DOCUMENT-IDENTIFIER: US 5819244 A

TITLE: Adaptive computing systems, computer readable memories and processes  
employing hyperlinear chromosomes

DATE-ISSUED: October 6, 1998

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Smith; Brian L.	Sunnyvale	CA		

US-CL-CURRENT: 706/13; 706/10, 706/14

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Drawings
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☐ 13. Document ID: US 5651098 A

L4: Entry 13 of 17

File: USPT

Jul 22, 1997

US-PAT-NO: 5651098

DOCUMENT-IDENTIFIER: US 5651098 A

TITLE: Planning method and system

DATE-ISSUED: July 22, 1997

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Inoue; Haruki	Katsuta			JP
Mizutani; Mayumi	Hitachi			JP
Yoshida; Hideo	Takahagi			JP
Onizawa; Hitoshi	Hitachi			JP
Nakamura; Kenichi	Hitachiota			JP
Hamaguchi; Yukio	Hitachi			JP
Shiozawa; Masami	Hitachi			JP

US-CL-CURRENT: 706/13; 703/1, 706/922, 716/1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Drawings
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☐ 14. Document ID: US 5581657 A

L4: Entry 14 of 17

File: USPT

Dec 3, 1996

US-PAT-NO: 5581657

DOCUMENT-IDENTIFIER: US 5581657 A

TITLE: System for integrating multiple genetic algorithm applications

DATE-ISSUED: December 3, 1996

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lyon; Bruce C.	Victor	NY		

US-CL-CURRENT: 706/13

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Draw. De
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☐ 15. Document ID: US 5255345 A

L4: Entry 15 of 17

File: USPT

Oct 19, 1993

US-PAT-NO: 5255345

DOCUMENT-IDENTIFIER: US 5255345 A

**\*\* See image for Certificate of Correction \*\***

TITLE: Genetic algorithm

DATE-ISSUED: October 19, 1993

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Shaefer; Craig G.	Charlestown	MA		

US-CL-CURRENT: 706/13

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Draw. De
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☐ 16. Document ID: US 5222192 A

L4: Entry 16 of 17

File: USPT

Jun 22, 1993

US-PAT-NO: 5222192

DOCUMENT-IDENTIFIER: US 5222192 A

TITLE: Optimization techniques using genetic algorithms

DATE-ISSUED: June 22, 1993

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Shaefer; Craig G.	Charlestown	MA		

US-CL-CURRENT: 706/13

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Draw. De
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☐ 17. Document ID: US 4935877 A

L4: Entry 17 of 17

File: USPT

Jun 19, 1990

US-PAT-NO: 4935877

DOCUMENT-IDENTIFIER: US 4935877 A



TITLE: Non-linear genetic algorithms for solving problems

DATE-ISSUED: June 19, 1990

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Koza; John R.	Las Vegas	NV	89109	

US-CL-CURRENT: 706/13; 706/922

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMOC	Draw D
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L3 and traveling adj salesman adj problem

17

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## Refine Search

### Search Results -

Terms	Documents
L5 and visit\$4 and location\$2 and route and distance and time	4

Database:

US Pre-Grant Publication Full-Text Database  
 US Patents Full-Text Database  
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 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

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L6

Refine Search

Recall Text

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### Search History

DATE: Tuesday, July 27, 2004    [Printable Copy](#)    [Create Case](#)

#### Set Name Query

side by side

#### Hit Count Set Name

result set

*DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=NO; OP=OR*

<u>L6</u>	L5 and visit\$4 and location\$2 and route and distance and time	4	<u>L6</u>
<u>L5</u>	L4 and genetic adj algorithm	17	<u>L5</u>
<u>L4</u>	L3 and traveling adj salesman adj problem	17	<u>L4</u>
<u>L3</u>	706/13.ccls.	220	<u>L3</u>
<u>L2</u>	760/13.ccls.	0	<u>L2</u>
<u>L1</u>	20030084011	2	<u>L1</u>

END OF SEARCH HISTORY

## Hit List

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Generate Collection

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Generate OACS

**Search Results - Record(s) 1 through 4 of 4 returned.**☐ 1. Document ID: US 20030093391 A1**Using default format because multiple data bases are involved.**

L6: Entry 1 of 4

File: PGPB

May 15, 2003

PGPUB-DOCUMENT-NUMBER: 20030093391

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030093391 A1

TITLE: Combinatorial fitness function circuit

PUBLICATION-DATE: May 15, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Shackleford, J. Barry	Portola Valley	CA	US	

US-CL-CURRENT: 706/13

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 2. Document ID: US 20030084011 A1

L6: Entry 2 of 4

File: PGPB

May 1, 2003

PGPUB-DOCUMENT-NUMBER: 20030084011

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030084011 A1

TITLE: Methods for solving the traveling salesman problem

PUBLICATION-DATE: May 1, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Shetty, Ravindra K.	Bangalore		IN	

US-CL-CURRENT: 706/13

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 3. Document ID: US 6363368 B1

L6: Entry 3 of 4

File: USPT

Mar 26, 2002

US-PAT-NO: 6363368

DOCUMENT-IDENTIFIER: US 6363368 B1

TITLE: Optimum solution search method and optimum solution search apparatus as well as storage medium in which optimum solution search program is stored

DATE-ISSUED: March 26, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Shinagawa; Akio	Kawasaki			JP

US-CL-CURRENT: 706/13

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Drawings
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☐ 4. Document ID: US 6052678 A

L6: Entry 4 of 4

File: USPT

Apr 18, 2000

US-PAT-NO: 6052678

DOCUMENT-IDENTIFIER: US 6052678 A

**\*\* See image for Certificate of Correction \*\***

TITLE: Problem solving operation apparatus using a state transition

DATE-ISSUED: April 18, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Itoh; Hiroyasu	Kawasaki			JP
Shinagawa; Akio	Kawasaki			JP
Nishimura; Toshihiro	Kawasaki			JP
Okada; Hiroyuki	Kawasaki			JP
Adachi; Nobue	Kawasaki			JP
Ohi; Hajime	Tokyo			JP

US-CL-CURRENT: 706/13; 706/20, 706/45

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Drawings
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Clear

Generate Collection

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L5 and visit\$4 and location\$2 and route and distance and time

4

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**Display Format:**  **Change Format**

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## Refine Search

### Search Results -

Terms	Documents
L3 and (traveling adj salesman or traveling adj salesperson) and genetic adj algorithm and visit\$4 and location\$2 and route and distance and time	6

Database:

US Pre-Grant Publication Full-Text Database  
 US Patents Full-Text Database  
 US OCR Full-Text Database  
 EPO Abstracts Database  
 JPO Abstracts Database  
 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

Search:






### Search History

 DATE: Tuesday, July 27, 2004    [Printable Copy](#)    [Create Case](#)

<u>Set</u> <u>Name</u> <u>Query</u> side by side	<u>Hit</u> <u>Count</u>	<u>Set</u> <u>Name</u> result set
<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=NO; OP=OR</i>		
<u>L7</u> L3 and (traveling adj salesman or traveling adj salesperson) and genetic adj algorithm and visit\$4 and location\$2 and route and distance and time	6	<u>L7</u>
<u>L6</u> L5 and visit\$4 and location\$2 and route and distance and time	4	<u>L6</u>
<u>L5</u> L4 and genetic adj algorithm	17	<u>L5</u>
<u>L4</u> L3 and traveling adj salesman adj problem	17	<u>L4</u>
<u>L3</u> 706/13.ccls.	220	<u>L3</u>
<u>L2</u> 760/13.ccls.	0	<u>L2</u>
<u>L1</u> 20030084011	2	<u>L1</u>

END OF SEARCH HISTORY

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Search Results - Record(s) 1 through 6 of 6 returned.

☐ 1. Document ID: US 20030093391 A1

Using default format because multiple data bases are involved.

L7: Entry 1 of 6

File: PGPB

May 15, 2003

PGPUB-DOCUMENT-NUMBER: 20030093391

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030093391 A1

TITLE: Combinatorial fitness function circuit

PUBLICATION-DATE: May 15, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Shackleford, J. Barry	Portola Valley	CA	US	

US-CL-CURRENT: 706/13

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 2. Document ID: US 20030084011 A1

L7: Entry 2 of 6

File: PGPB

May 1, 2003

PGPUB-DOCUMENT-NUMBER: 20030084011

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030084011 A1

TITLE: Methods for solving the traveling salesman problem

PUBLICATION-DATE: May 1, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Shetty, Ravindra K.	Bangalore		IN	

US-CL-CURRENT: 706/13

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 3. Document ID: US 20010011258 A1

L7: Entry 3 of 6

File: PGPB

Aug 2, 2001

PGPUB-DOCUMENT-NUMBER: 20010011258  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20010011258 A1

TITLE: OPTIMUM SOLUTION SEARCH METHOD AND OPTIMUM SOLUTION SEARCH APPARATUS AS WELL  
AS STORAGE MEDIUM IN WHICH OPTIMUM SOLUTION SEARCH PROGRAM IS STORED

PUBLICATION-DATE: August 2, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
SHINAGAWA, AKIO	KAWASAKI-SHI		JP	

US-CL-CURRENT: 706/13

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Draw D
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☐ 4. Document ID: US 6363368 B1

L7: Entry 4 of 6

File: USPT

Mar 26, 2002

US-PAT-NO: 6363368  
DOCUMENT-IDENTIFIER: US 6363368 B1

TITLE: Optimum solution search method and optimum solution search apparatus as well  
as storage medium in which optimum solution search program is stored

DATE-ISSUED: March 26, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Shinagawa; Akio	Kawasaki			JP

US-CL-CURRENT: 706/13

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Draw D
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☐ 5. Document ID: US 6327582 B1

L7: Entry 5 of 6

File: USPT

Dec 4, 2001

US-PAT-NO: 6327582  
DOCUMENT-IDENTIFIER: US 6327582 B1

TITLE: Method and system for genetic programming

DATE-ISSUED: December 4, 2001



## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Worzel; William P.	Milan	MI	48160	

US-CL-CURRENT: 706/13

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Drawings
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☐ 6. Document ID: US 6052678 A

L7: Entry 6 of 6

File: USPT

Apr 18, 2000

US-PAT-NO: 6052678

DOCUMENT-IDENTIFIER: US 6052678 A

**\*\* See image for Certificate of Correction \*\***

TITLE: Problem solving operation apparatus using a state transition

DATE-ISSUED: April 18, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Itoh; Hiroyasu	Kawasaki			JP
Shinagawa; Akio	Kawasaki			JP
Nishimura; Toshihiro	Kawasaki			JP
Okada; Hiroyuki	Kawasaki			JP
Adachi; Nobue	Kawasaki			JP
Ohi; Hajime	Tokyo			JP

US-CL-CURRENT: 706/13; 706/20, 706/45

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Drawings
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Terms	Documents
L3 and (traveling adj salesman or traveling adj salesperson) and genetic adj algorithm and visit\$4 and location\$2 and route and distance and time	6

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## Refine Search

### Search Results -

Terms	Documents
(traveling adj salesman or traveling adj salesperson) and genetic adj algorithm and visit\$4 and location\$2 and route and distance and time and fitness and chromosomes	7

Database:

US Pre-Grant Publication Full-Text Database  
 US Patents Full-Text Database  
 US OCR Full-Text Database  
 EPO Abstracts Database  
 JPO Abstracts Database  
 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

Search:






### Search History

 DATE: Tuesday, July 27, 2004    [Printable Copy](#)    [Create Case](#)

<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name result set</u>
side by side			
<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=NO; OP=OR</i>			
<u>L9</u>	(traveling adj salesman or traveling adj salesperson) and genetic adj algorithm and visit\$4 and location\$2 and route and distance and time and fitness and chromosomes	7	<u>L9</u>
<u>L8</u>	L7 and fitness and chromosomes	5	<u>L8</u>
<u>L7</u>	L3 and (traveling adj salesman or traveling adj salesperson) and genetic adj algorithm and visit\$4 and location\$2 and route and distance and time	6	<u>L7</u>
<u>L6</u>	L5 and visit\$4 and location\$2 and route and distance and time	4	<u>L6</u>
<u>L5</u>	L4 and genetic adj algorithm	17	<u>L5</u>
<u>L4</u>	L3 and traveling adj salesman adj problem	17	<u>L4</u>
<u>L3</u>	706/13.ccls.	220	<u>L3</u>
<u>L2</u>	760/13.ccls.	0	<u>L2</u>
<u>L1</u>	20030084011	2	<u>L1</u>

END OF SEARCH HISTORY

## Hit List

Clear

Generate Collection

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Fwd Refs

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**Search Results - Record(s) 1 through 5 of 5 returned.**☐ 1. Document ID: US 20030093391 A1**Using default format because multiple data bases are involved.**

L8: Entry 1 of 5

File: PGPB

May 15, 2003

PGPUB-DOCUMENT-NUMBER: 20030093391

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030093391 A1

TITLE: Combinatorial fitness function circuit

PUBLICATION-DATE: May 15, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Shackleford, J. Barry	Portola Valley	CA	US	

US-CL-CURRENT: 706/13

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. D.
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☐ 2. Document ID: US 20030084011 A1

L8: Entry 2 of 5

File: PGPB

May 1, 2003

PGPUB-DOCUMENT-NUMBER: 20030084011

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030084011 A1

TITLE: Methods for solving the traveling salesman problem

PUBLICATION-DATE: May 1, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Shetty, Ravindra K.	Bangalore		IN	

US-CL-CURRENT: 706/13

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. D.
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☐ 3. Document ID: US 20010011258 A1

L8: Entry 3 of 5

File: PGPB

Aug 2, 2001

PGPUB-DOCUMENT-NUMBER: 20010011258  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20010011258 A1

TITLE: OPTIMUM SOLUTION SEARCH METHOD AND OPTIMUM SOLUTION SEARCH APPARATUS AS WELL  
AS STORAGE MEDIUM IN WHICH OPTIMUM SOLUTION SEARCH PROGRAM IS STORED

PUBLICATION-DATE: August 2, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
SHINAGAWA, AKIO	KAWASAKI-SHI		JP	

US-CL-CURRENT: 706/13

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 4. Document ID: US 6363368 B1

L8: Entry 4 of 5

File: USPT

Mar 26, 2002

US-PAT-NO: 6363368  
DOCUMENT-IDENTIFIER: US 6363368 B1

TITLE: Optimum solution search method and optimum solution search apparatus as well  
as storage medium in which optimum solution search program is stored

DATE-ISSUED: March 26, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Shinagawa; Akio	Kawasaki			JP

US-CL-CURRENT: 706/13

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 5. Document ID: US 6052678 A

L8: Entry 5 of 5

File: USPT

Apr 18, 2000

US-PAT-NO: 6052678  
DOCUMENT-IDENTIFIER: US 6052678 A  
\*\* See image for Certificate of Correction \*\*

TITLE: Problem solving operation apparatus using a state transition

DATE-ISSUED: April 18, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Itoh; Hiroyasu	Kawasaki			JP
Shinagawa; Akio	Kawasaki			JP
Nishimura; Toshihiro	Kawasaki			JP
Okada; Hiroyuki	Kawasaki			JP
Adachi; Nobue	Kawasaki			JP
Ohi; Hajime	Tokyo			JP

US-CL-CURRENT: 706/13; 706/20, 706/45

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Alterations	Claims	KWC	Draw D
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Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs	Generate OACS
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Terms	Documents
L7 and fitness and chromosomes	5

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## Refine Search

### Search Results -

Terms	Documents
(traveling adj salesman or traveling adj salesperson) and genetic adj algorithm and visit\$4 and location\$2 and route and distance and time and fitness and chromosomes	7

Database:

US Pre-Grant Publication Full-Text Database  
 US Patents Full-Text Database  
 US OCR Full-Text Database  
 EPO Abstracts Database  
 JPO Abstracts Database  
 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

Search:

Refine Search

Recall Text

Clear

Interrupt

### Search History

 DATE: Tuesday, July 27, 2004    [Printable Copy](#)    [Create Case](#)

<u>Set</u> <u>Name</u>	<u>Query</u>	<u>Hit</u> <u>Count</u>	<u>Set</u> <u>Name</u> result set
<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=NO; OP=OR</i>			
<u>L9</u>	(traveling adj salesman or traveling adj salesperson) and genetic adj algorithm and visit\$4 and location\$2 and route and distance and time and fitness and chromosomes	7	<u>L9</u>
<u>L8</u>	L7 and fitness and chromosomes	5	<u>L8</u>
<u>L7</u>	L3 and (traveling adj salesman or traveling adj salesperson) and genetic adj algorithm and visit\$4 and location\$2 and route and distance and time	6	<u>L7</u>
<u>L6</u>	L5 and visit\$4 and location\$2 and route and distance and time	4	<u>L6</u>
<u>L5</u>	L4 and genetic adj algorithm	17	<u>L5</u>
<u>L4</u>	L3 and traveling adj salesman adj problem	17	<u>L4</u>
<u>L3</u>	706/13.ccls.	220	<u>L3</u>
<u>L2</u>	760/13.ccls.	0	<u>L2</u>
<u>L1</u>	20030084011	2	<u>L1</u>

END OF SEARCH HISTORY



## Hit List

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Search Results - Record(s) 1 through 7 of 7 returned.

☐ 1. Document ID: US 20040102863 A1

Using default format because multiple data bases are involved.

L9: Entry 1 of 7

File: PGPB

May 27, 2004

PGPUB-DOCUMENT-NUMBER: 20040102863

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040102863 A1

TITLE: Method of determining movement sequence, alignment apparatus, method and apparatus of designing optical system, and medium in which program realizing the designing method

PUBLICATION-DATE: May 27, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Yoshida, Koji	Kanagawa		JP	
Ono, Isao	Kanagawa		JP	
Tatsuzawa, Yoshihiro	Kanagawa		JP	
Kobayashi, Shigenobu	Tokyo		JP	

US-CL-CURRENT: 700/97

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Drawn De
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☐ 2. Document ID: US 20030093391 A1

L9: Entry 2 of 7

File: PGPB

May 15, 2003

PGPUB-DOCUMENT-NUMBER: 20030093391

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030093391 A1

TITLE: Combinatorial fitness function circuit

PUBLICATION-DATE: May 15, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Shackleford, J. Barry	Portola Valley	CA	US	

US-CL-CURRENT: 706/13

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 3. Document ID: US 20030084011 A1

L9: Entry 3 of 7

File: PGPB

May 1, 2003

PGPUB-DOCUMENT-NUMBER: 20030084011

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030084011 A1

TITLE: Methods for solving the traveling salesman problem

PUBLICATION-DATE: May 1, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Shetty, Ravindra K.	Bangalore		IN	

US-CL-CURRENT: 706/13

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 4. Document ID: US 20010053962 A1

L9: Entry 4 of 7

File: PGPB

Dec 20, 2001

PGPUB-DOCUMENT-NUMBER: 20010053962

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20010053962 A1

TITLE: Method of determining movement sequence, alignment apparatus, method and apparatus of designing optical system, and medium in which program realizing the designing method

PUBLICATION-DATE: December 20, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Yoshida, Koji	Kanagawa		JP	
Kiyohara, Junya	Kanagawa		JP	
Ono, Isao	Kanagawa		JP	
Tatsuzawa, Yoshihiro	Kanagawa		JP	
Kobayashi, Shigenobu	Tokyo		JP	

US-CL-CURRENT: 702/123

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 5. Document ID: US 20010011258 A1

L9: Entry 5 of 7

File: PGPB

Aug 2, 2001

PGPUB-DOCUMENT-NUMBER: 20010011258  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20010011258 A1

TITLE: OPTIMUM SOLUTION SEARCH METHOD AND OPTIMUM SOLUTION SEARCH APPARATUS AS WELL  
AS STORAGE MEDIUM IN WHICH OPTIMUM SOLUTION SEARCH PROGRAM IS STORED

PUBLICATION-DATE: August 2, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
SHINAGAWA, AKIO	KAWASAKI-SHI		JP	

US-CL-CURRENT: 706/13

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 6. Document ID: US 6363368 B1

L9: Entry 6 of 7

File: USPT

Mar 26, 2002

US-PAT-NO: 6363368  
DOCUMENT-IDENTIFIER: US 6363368 B1

TITLE: Optimum solution search method and optimum solution search apparatus as well  
as storage medium in which optimum solution search program is stored

DATE-ISSUED: March 26, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Shinagawa; Akio	Kawasaki			JP

US-CL-CURRENT: 706/13

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 7. Document ID: US 6052678 A

L9: Entry 7 of 7

File: USPT

Apr 18, 2000

US-PAT-NO: 6052678  
DOCUMENT-IDENTIFIER: US 6052678 A  
\*\* See image for Certificate of Correction \*\*

TITLE: Problem solving operation apparatus using a state transition

DATE-ISSUED: April 18, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Itoh; Hiroyasu	Kawasaki			JP
Shinagawa; Akio	Kawasaki			JP
Nishimura; Toshihiro	Kawasaki			JP
Okada; Hiroyuki	Kawasaki			JP
Adachi; Nobue	Kawasaki			JP
Ohi; Hajime	Tokyo			JP

US-CL-CURRENT: 706/13, 706/20, 706/45

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Draw. De
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Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs	Generate OACS
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Terms	Documents
(traveling adj salesman or traveling adj salesperson) and genetic adj algorithm and visit\$4 and location\$2 and route and distance and time and fitness and chromosomes	7

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## Refine Search

### Search Results -

Terms	Documents
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Search:

L9

Refine Search

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Clear

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### Search History

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<u>Set</u> <u>Name</u>	<u>Query</u>	<u>Hit</u> <u>Count</u>	<u>Set</u> <u>Name</u> result set
side by side			
<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=NO; OP=OR</i>			
<u>L9</u>	(traveling adj salesman or traveling adj salesperson) and genetic adj algorithm and visit\$4 and location\$2 and route and distance and time and fitness and chromosomes	7	<u>L9</u>
<u>L8</u>	L7 and fitness and chromosomes	5	<u>L8</u>
<u>L7</u>	L3 and (traveling adj salesman or traveling adj salesperson) and genetic adj algorithm and visit\$4 and location\$2 and route and distance and time	6	<u>L7</u>
<u>L6</u>	L5 and visit\$4 and location\$2 and route and distance and time	4	<u>L6</u>
<u>L5</u>	L4 and genetic adj algorithm	17	<u>L5</u>
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<u>L3</u>	706/13.ccls.	220	<u>L3</u>
<u>L2</u>	760/13.ccls.	0	<u>L2</u>
<u>L1</u>	20030084011	2	<u>L1</u>

END OF SEARCH HISTORY